a family centered approach is highly recommended in pediatric wards. Keywords: Handover, Pediatric Nursing, Content Analysis, Iran.

Effect of non-nutritive sucking and leg massage on physiological and behavioral indicators of pain following heel blood sampling in term neonates

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Background: Pain management is especially important for neonates, since they are not able to verbally express their pain. Non-pharmacological pain management method as an alternative to pharmacological pain medication has increased nowadays. Objectives: The purpose of this study was to test the effect of leg massage and non-nutritive sucking (NNS) on reducing the pain that neonates experience when undergoing the heel stick procedure for blood testing.
Methods: This investigation was a random controlled clinical trial study on ninety neonates who were selected randomly among admitted neonates to NICU in Alavi hospital at Ardabil. The subjects were randomly classified in two case and one control groups. The neonates received leg massage (n=30), NNS (n=30), and no intervention (n=30) respectively. Measurements of HR and SaO2 were taken twice: once before and then again after intervention. Pain response was measured by the PIPP scale.
Findings: The study showed that the HR of the three groups significantly increased after heel stick compared to before heel stick. The change of SaO2 levels in NNS groups was lower than the control and massage groups. The change of PIPP scores in massage and NNS groups was lower than that of the control group; however, there was not statistically significant differences between NNS & massage groups(p=0. 91).
Conclusion: pain management and pain relief in the infant is an important issue in neonatal health care. It is suggested that the single or combined use of massage and a pacifier is effective in reducing pain responses in neonates undergoing heel stick.
Key words: Heel Stick, Massage, Neonate, Nonnutritive Sucking, Pain

Effect of Nesting on Motor Stress Behaviors in Preterm Infants Hospitalized in the Newborn Intensive Care Unit (NICU)

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Background: Preterm infants in the Newborn Intensive Care Unit (NICU) often experience stress due to the intensive care environment. Because of the loss of the position-supportive uterus, their movement patterns easily become disorganized and in turn to increase their motor extensor behaviors. In order to counteract this effect it has been suggested to support the infant's position in a nest in analogy to the womb. This study was conducted with the aim to decrease extensor motor behaviors by bedding preterm infants in nests while hospitalized in the NICU.
Method: The study was designed as a randomized controlled clinic trial. Forty-four medically stable preterm infants, hospitalized at the Hazrate Rasool Akram NICU, with gestational ages between 30 and 34 weeks and birth weights of > 1100g, were recruited consecutively into the study. The experimental group (E) (n = 22) was bedded in a U-shaped cloth nest for seven days. The control group (C) (n = 22) was cared for on a flat mattress throughout a comparable seven-day period. All infants were bedded on a flat surface in the prone position and videotaped for 20 minutes on the first day prior to onset of the intervention, and again after the termination of the intervention on day 7. Seventeen motor stress behaviors, as defined in the Manual for the Naturalistic Observation of the Newborn (Preterm and Fullterm) and recorded on the NIDCAP observation sheet (Als, 1984) was used for video analysis. Data were analyzed by software SPSS (version 14).
Findings: The E-group showed a statistically significant decrease of total stress motor behaviors from before onset (55. 23 ± 6. 53) to after termination (33. 86 ± 8. 58) of the intervention (p <0. 001). There was no statistical difference between the first day (54. 09±5. 95) and day 7 (56. 41 ± 11. 67) for the control group (p = 0. 184).
Conclusion: Based on these findings, it is recommended to support preterm infants' positions with a cloth nest throughout hospitalization. It is presumed that nesting may improve preterm infants' motor system development and therewith perhaps their health and development.

Assessment of the effect of a nutritional readiness care plan on the length of time from non-oral to full-oral nutrition in the hospitalized premature infants in neonatal intensive care unit of Isfahan University of medical Sciences

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The influenced of nutritional readiness care plan was analyzed through a randomized clinical trial, which included a sample of 50 infants. The preterm infants were recruited from two hospitals of Isfahan (Beheshti and Alzahra) and after parental consent was obtained, were randomized in to experimental and control group (25 males, 25 females). Pre-oral phase included stimulation of cheek and lips (with right hand in all participant) through 7 and intra-oral stimulation included of gums, upper palate, into cheeks, middle blade of tonue, and non-nutritive sucking for 7 minutes such table1 and after 1 minutes resting allowed the infant to suck on finger for 2 minutes. Then neck also was stimulated with a calm movement of upper to lower part only once at each sides. In each step that baby had oxygen desaturated or significant variation in vital signs the interventions was stopped. For those who take milk orally the next phase included swelling evaluation has done with variation of vital signs through swelling (bradycardia, tachycardia, spo2 variations and apnea). After feeding the infant was put in prone or lateral position and one of her/his hands put close to the mouth. Finally, the jaw and tongue was evaluated with neonatal oral motor assessment scale (NOMAS) and if baby was in normal stage through last 24 hour, he/she would ready for full oral feeding. Infants in the control group did not receive any stimulation. Rather the researcher placed her